GETTING STARTED

WAREFAB KONNECT

ESP32 SIGFOX

DEVELOPMENT BOARD

Installing Arduino IDE

Konnect ESP32 Sigfox dev board can be programmed using either python, Lua, Js, C and C++.

This tutorial will focus on C/C++ using Arduino as the IDE.

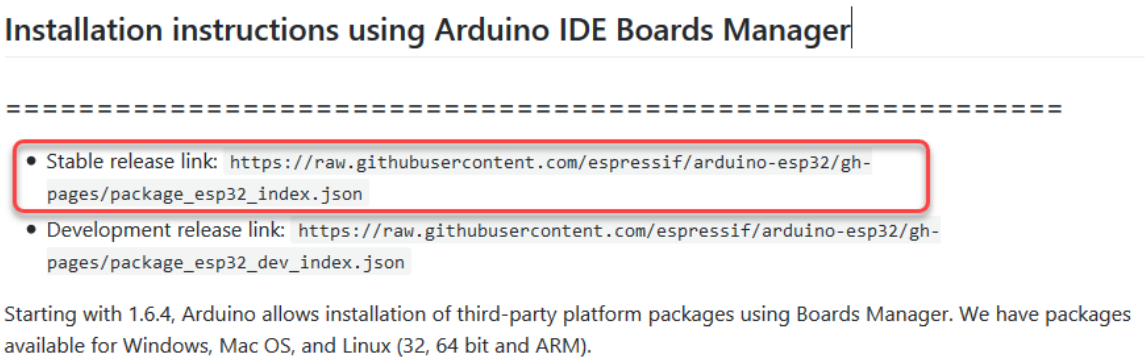
Download Arduino IDE

- Go to https://www.arduino.cc/en/Main/Software and download the latest release if you don't have the IDE already installed.

- Complete the installation instructions and open the IDE.

Installing ESP32 Dependencies

- Go to https://github.com/espressif/arduino-esp32/blob/master/docs/arduino-ide/boards_manager.md and copy the installation board url (stable release).
- Or copy https://raw.githubusercontent.com/espressif/arduino-esp32/gh-pages/package_esp32_index.json



Installation instructions using Arduino IDE Boards Manager

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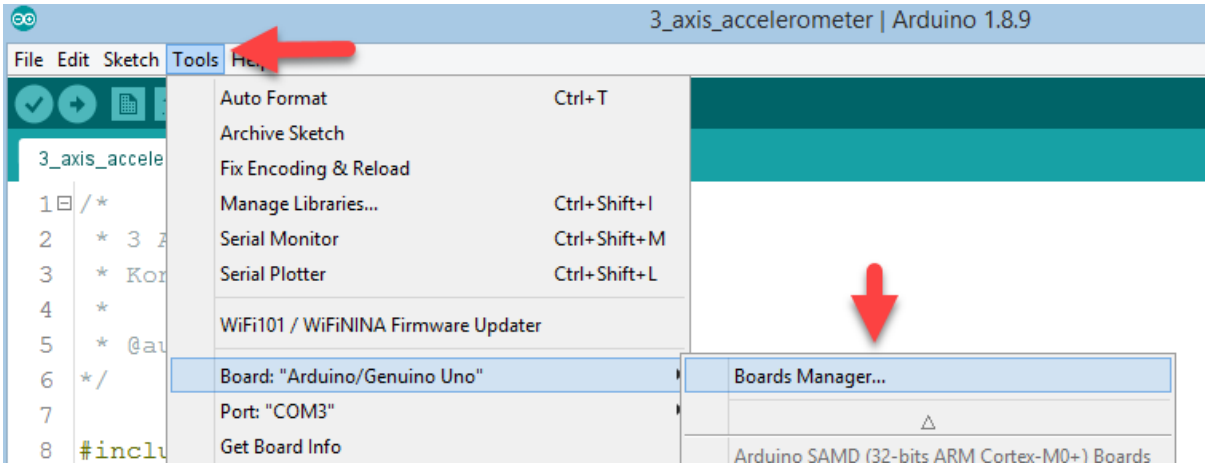
- Stable release link: `https://raw.githubusercontent.com/espressif/arduino-esp32/gh-pages/package_esp32_index.json`
- Development release link: `https://raw.githubusercontent.com/espressif/arduino-esp32/gh-pages/package_esp32_dev_index.json`

Starting with 1.6.4, Arduino allows installation of third-party platform packages using Boards Manager. We have packages available for Windows, Mac OS, and Linux (32, 64 bit and ARM).

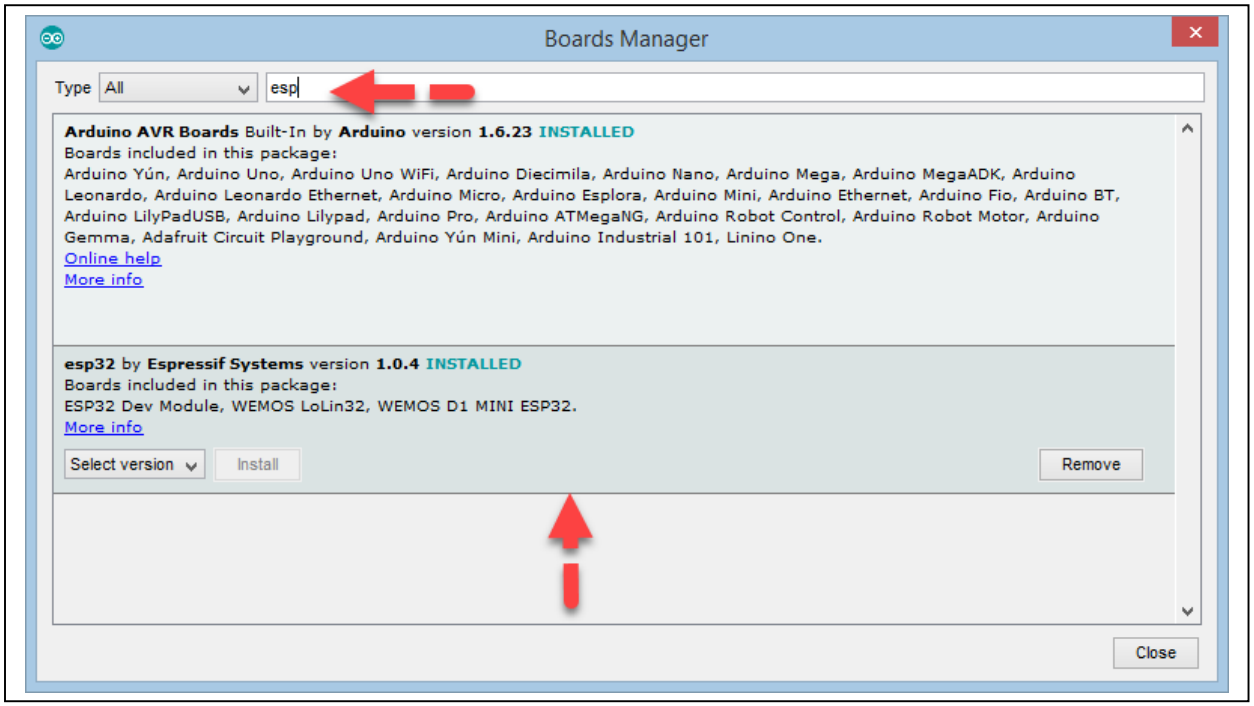
- On the Arduino IDE, open File-Preferences and paste the link in the "**Additional Board Manager URLs**"

- Close the preferences window

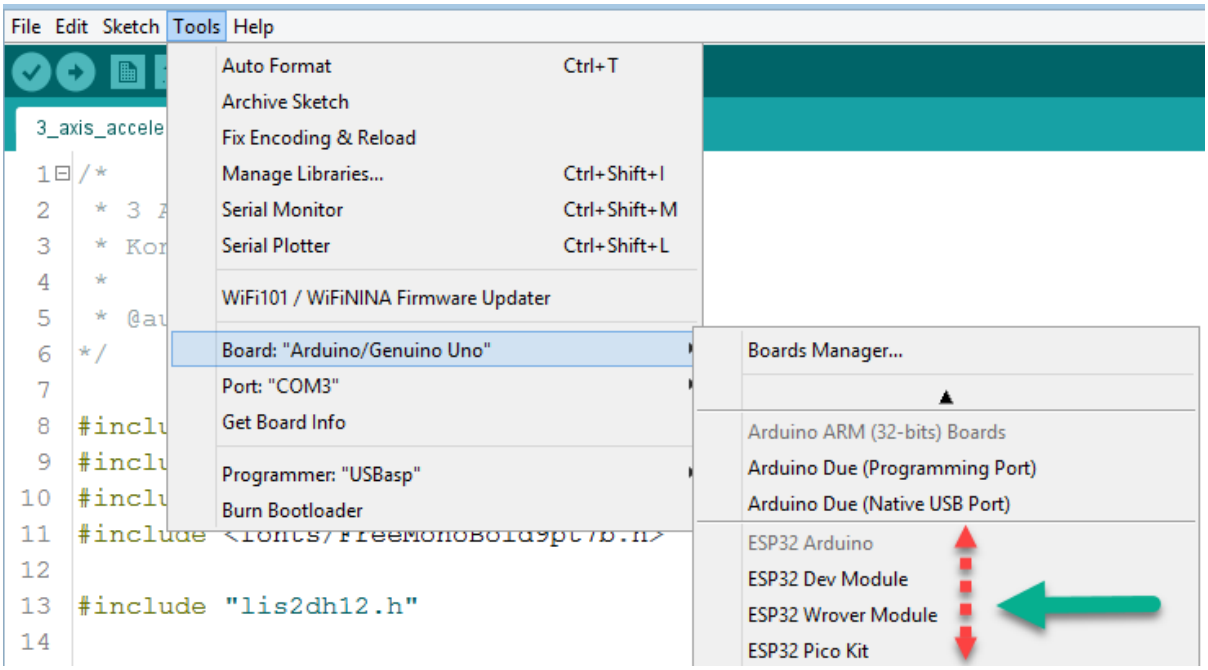
- On the IDE, go to Tools – Board – Board Manager to open board manager window.



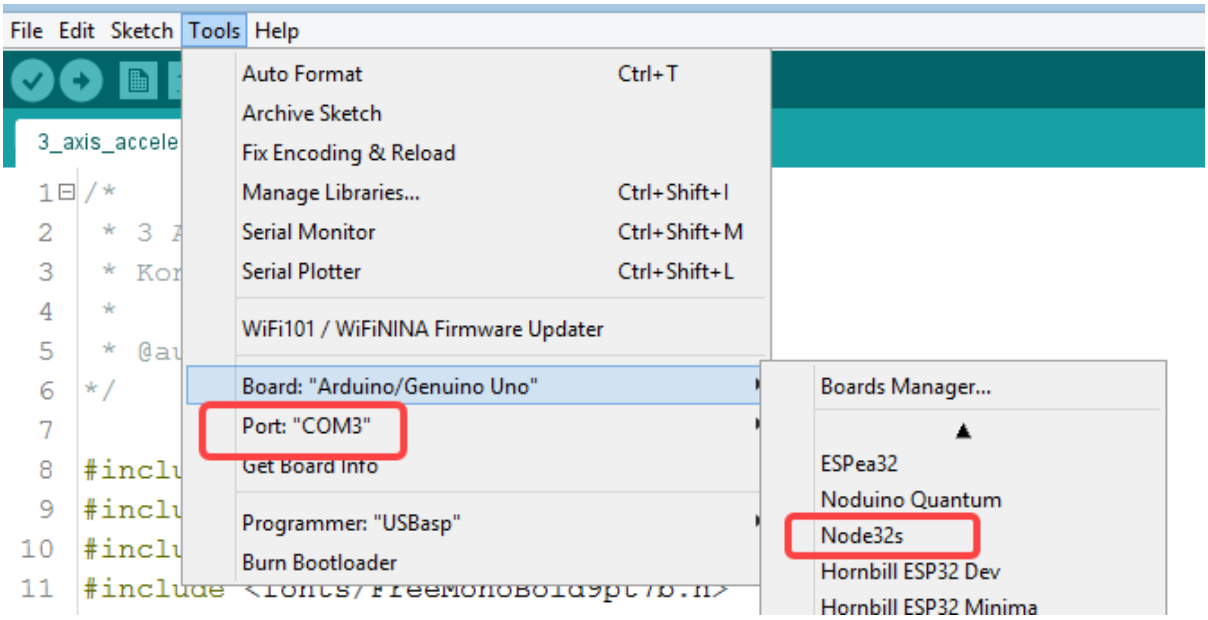
- Search "esp" and install the dependencies



- Confirm if the installation is successful, go to Tools-Board and check if there are additional boards for esp32, "ESP32 Arduino", installed.

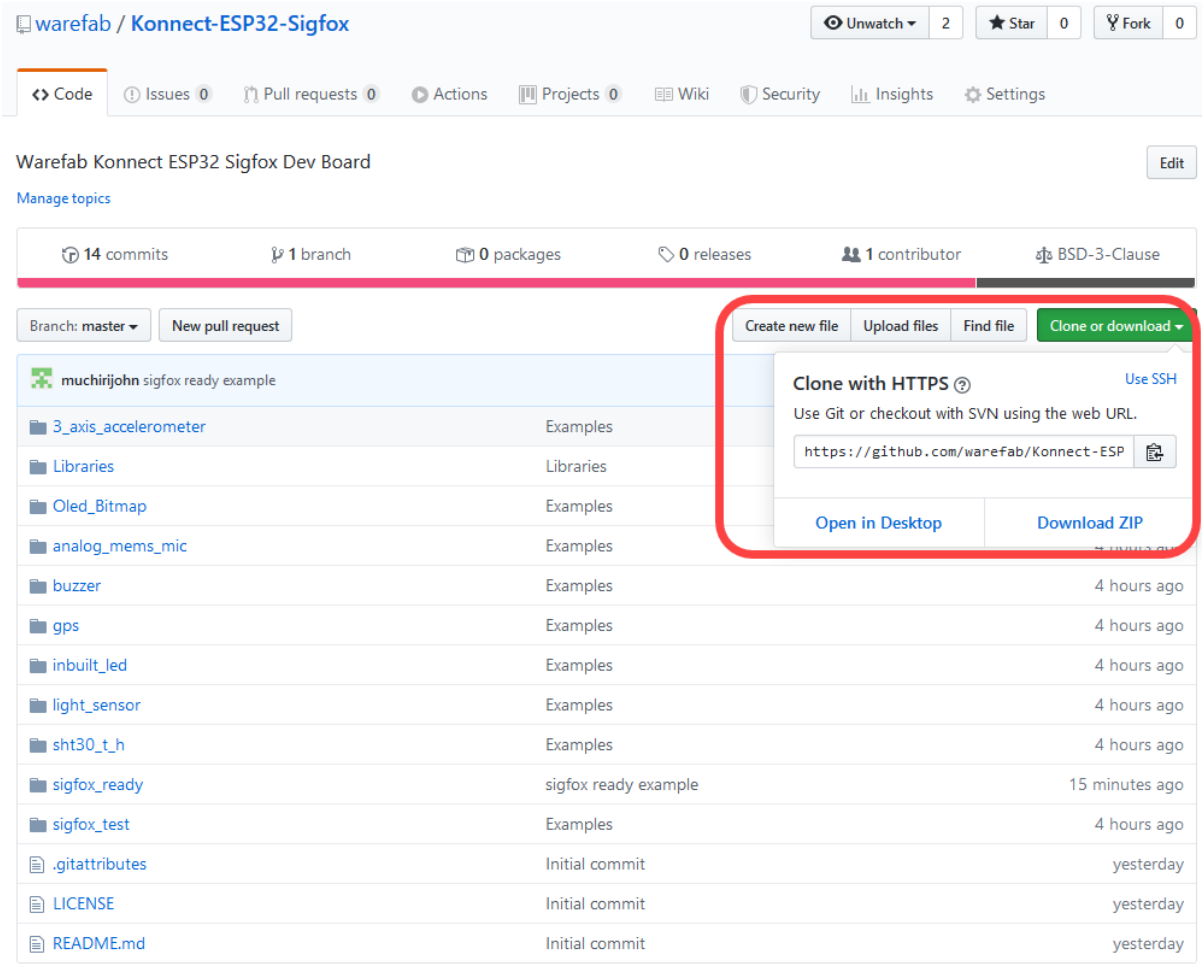


- Scroll down and select "Node32s"
- Select the COM Port the kit is connected to.

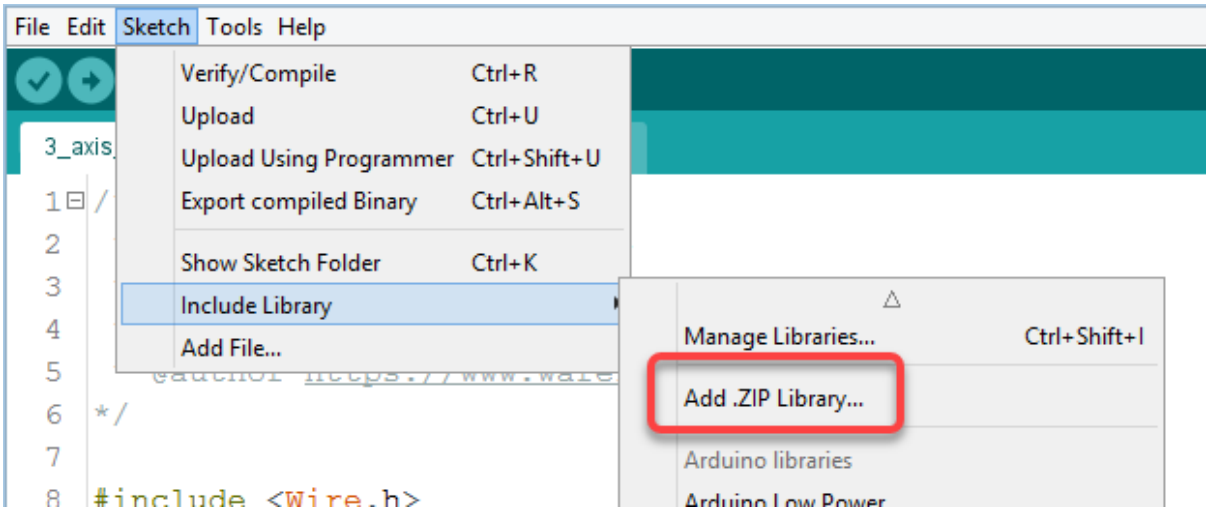


Using Konnect ESP32 Sigfox Kit

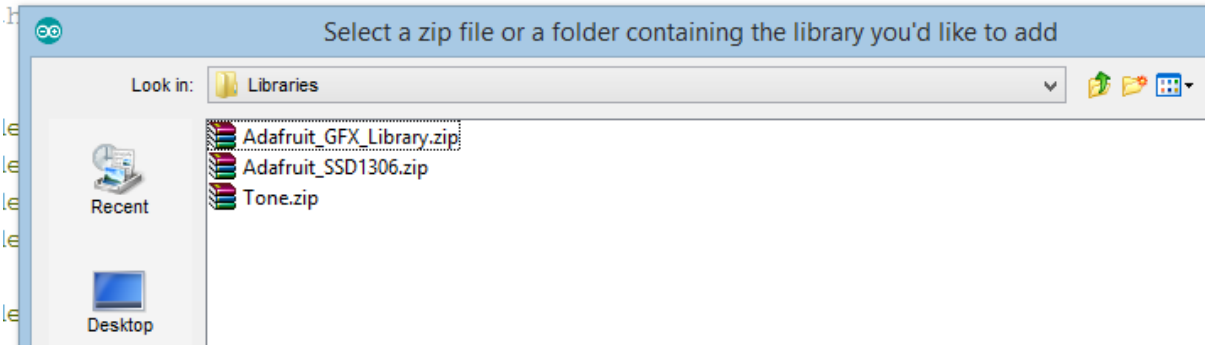
- Download libraries and examples at https://github.com/warefab/Konnect-ESP32-Sigfox and Clone/Download the repo.



- To add libraries, on the IDE, go to Sketch – Include Library – add .ZIP library to open libraries window



- Navigate to downloaded repo folder, go to libraries and add the zip files.



- Add the Libraries
  - Adafruit_GFX_Library.zip
  - Adafruit_SSD1306.zip
  - Tone.zip

- Open the examples in the repo by clicking the [example].ino file

3_axis_accelerometer.ino	Test 3 axis accelerometer sensor
analog_mems_mic.ino	Test analog mems mic sensor
Buzzer.ino	Test buzzer – creates tones
gps.ino	Test GPS module – gets location
light_sensor.ino	Test ambient light sensor
sht30_t_h.ino	Test temperature and humidity sensor
sigfox_test.ino	Simple Sigfox test
sigfox_ready.ino	Sends kits sensor data to Sigfox cloud